EXHIBIT 3 - Subdivision Check List Design Aid

Development Name _____
Date _____ Checked By _____ Project # _____
Owner/Developer _____
Civil Engineer _____Township _____

GENERAL

- o SDS Application received.
- o Special Flood Hazard Area, Development Application and No-Rise form required.
- o Departmental approval, notify Regional Planning Commission.
- o Permits Plus final approval and plans to Public Works Inspectors.
- o Permits Plus storm review charges.
- o Record Plat approval. Check with Inspector for bond.
- o Plot CAGIS map.

SPECIAL FLOOD HAZARD AREA

- o This Development is located in FEMA numbered stream.
- o This Development is located in SFHA Consoer - Townsend stream.
- o HEC-RAS required.
- o Bulletin 45 required for drainage areas over 200 acres.
- o Print FEMA and or Consoer – Townsend maps and data tables.
- o Show SFHA elevations and limits.
- o Show BFE (Base Flood Elevation).
- o Show FPR (Flood Protection Elevation). Basement elevation 1’- 0” above BFE.
- o Flood Application and No-Rise Form.

STORM WATER MANAGEMENT

- o Exhibit 33 - Detention/Retention orifice and volume calculations.
- o Private Drainage Easement for Storm Water Detention/Retention Plat.
- o Storm water detention As-Built.
- o MOE (Minimum low floor, basement, or window Opening Elevation.
- o Earthen dikes to be provided downstream of field Inlets in most cases. Show the Q100 year elevations.
- o Plate 5 wing wall headwall at inlet and outlet with rock channel protection to be used in all developments.
- o Engineer to submit Q100 year head water depths, & Q100 year high water elevation and limits on grading plan.
- o Storm sewer pipe design, material, class, size, capacity, and velocity. Also, check for significant diversion. Minimum velocity in storm sewer pipes when flowing full shall not be less than 2.5 f.p.s. Maximum velocity in storm sewer pipe shall be 16 f.p.s.
- o Storm sewer pipe with flow velocities that exceed 16 f.p.s. and/or slopes greater than 15% will require special pipe as per Section ST 713(c).
- o Maximum velocity at outlets to be 12 f.p.s. unless an energy dissipater design is submitted.
- o Double grates required at all low point sags in pavement.
- o Vane grates provided where street profile grade exceeds 8%.
- o 1.0 c.f.s. maximum by-pass for street inlets with 8’-0” spread.
- o 0.5 c.f.s. maximum by-pass at intersections.
- o CB-3M and CB-3MH catch basins are used properly.
- o Field inlets, number and size of windows to accept Q100 design.
- o Provide Section A-A 10' width emergency overflow "V" swale and 10' Private Drainage Easement to rear of lot on downstream side at all low point sags in the pavement or cul-de-sac.
- o No diagonal emergency overflow swales permitted in the front yards.
- o Public and private storm sewer easements are properly shown.
- o Manholes are properly specified, located and spaced.
- o 20’ Private Drainage Easements, minimum.
- o Separate sediment basin when possible.
- o Lot-by-lot check for storm water entering or leaving. Minimum low floor elevations as required.
- o Do not raise the Q100 year elevation at the upstream property line.
- o Show the Q50 year hydraulic gradient on all storm sewers in the profile.
- o 10’ ingress and egress easement for storm water detention/retention maintenance.
- o Storm sewer notes.